

## **REMARKS/ARGUMENTS**

Claims 1-23 remain in this application.

Applicants respectfully traverse the rejection of claims 1-12 and 15-23 under 35 U.S.C. §103(a) as being unpatentable over Gantt et al (U.S. Patent No. 6,579,914).

According to the Patent Office:

“Gantt does not explicitly state that the primary coating is a hydrophilic coating. Further Gantt does not specifically disclose that (1) the primary coating exhibits substantially no water bubble formation and substantially no delamination when the coated optical fiber is soaked in water at 23°C for 30 days and when the coated optical fiber is soaked in water at 65°C for 60 days, (2) the primary coating exhibits an average of less than about 20 water bubbles 1  $\mu\text{m}$  or greater in diameter per mm of coated optical fiber when the coated optical fiber is soaked in water at 65°C for 60 days, (3) the primary coating has an average water absorption of at least about 4%, (4) the coated optical fiber has a dry pullout value of at least about 1 pound force, a 50% failure stress after being soaked in water at 65°C for 14 days that is within 10% of the 50% failure stress before being soaked, and a 50% failure stress after being exposed to 85% relative humidity at 85°C for 30 days that is within 10% of the 50% failure stress before the exposure, and (5) the second coating has a ductility of at least about 280  $\mu\text{m}$ .”

Applicants respectfully disagree that Gantt discloses a hydrophilic coating. Applicants submit that it is highly unlikely that the materials in Gantt would be hydrophilic because if they were, it is unlikely that the cationic polymerization process would work as they say it does. It is well known that cationic polymerization of such compositions disclosed by Gantt are inhibited by water. Therefore, without special processing for exclusion of water during coating manufacturing and fiber drawing, a hydrophilic cationic coating composition would not likely be practical

The Patent Office also states that “where the claimed and prior art products are identical or substantially identical in structure of composition,

or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977)” and that “products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658. (Fed. Cir. 1990).”

Applicants do not understand this comment by the Examiner. The claimed product and that of the prior art is in fact not identical in structure or composition. Note that the claimed composition is a hydrophilic primary coating encapsulating the optical fiber. There is no mention or suggestion in Gantt of such a hydrophilic primary coating. Clearly there is no mention or suggestion in Gantt of a structure which is hydrophilic. Likewise, the compositions disclosed by Gantt are different than those described by applicants. Applicants disclose acrylate based coating systems, while Gantt discloses compositions which are a hybrid of acrylate and cationic based polymer.

Also, the Patent Office indicated that “while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)” and that “a claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).”

Applicants disagree that the current claims are similar to those discussed in *Schreiber*. The claims of the present invention are not directed to an apparatus as was the case in *In re Schreiber*. Instead, applicants' invention is directed to an optical fiber coating. Thus, this is not the case where an apparatus is claimed having identical apparatus

features to the prior art and the claimed apparatus is distinguishable only upon functional limitations.

According to the Patent Office, "it is inherent that the primary coating of Gantt is a hydrophilic coating since the composition of the primary coating includes hydrophilic components (i.e. a polyether or polyester urethane (meth)acrylate oligomer, a monomer having a pendant hydroxyl group, and a monomer or oligomer having a poly(ethylene glycol) backbone) as stated above. And, it would have been obvious to one of ordinary skill in the art that the primary coating of Gantt has an average water absorption of at least about 4% since the primary coating is a hydrophilic coating."

Applicants disagree that the compositions disclosed in Gantt would inherently be hydrophilic. Polyethers may be hydrophilic, but not necessarily so. For instance, polyethylene glycol polymers are generally considered to be hydrophilic, yet polypropylene glycol and polybutylene glycol polymers are not. Likewise polyesters are not inherently hydrophilic. Some polyester urethane (meth)acrylates tend to degrade in the presence of water via a hydrolysis mechanism. For instance, the aliphatic polyester urethane acrylate oligomer, CN966, that was noted in the specification of Gantt was previously found by Corning to degrade in a cured coating composition when the cured coating was exposed to liquid water. With respect to the monomer having a pendant hydroxyl group, this is not part of the composition disclosed in Gantt, as it is in the present invention. Instead, this is merely a building block used to make the oligomer component of compositions disclosed in Gantt.

Based upon the above remarks and papers of records, applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Applicant believes that no extension of time is necessary to make this Reply timely. Should applicant be in error, applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said

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time extension to the deposit account of the undersigned firm of attorneys, Deposit  
Account 03-3325.

Please direct any questions or comments to Robert L. Carlson at 607-974-3502.

Respectfully submitted,



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